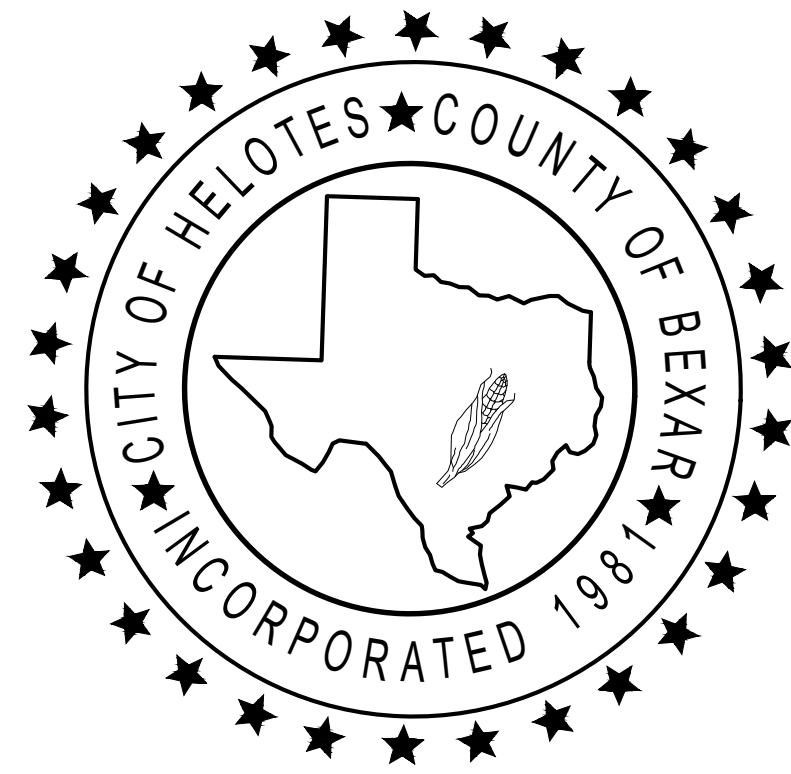


**Bid Proposal Form**  
**City of Helotes Leslie Rd Sidewalk Project**  
**City of Helotes, Texas**

**Date:** 5/4/2017

ITEM NO.	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
100.1	MOBILIZATION	LS	1	\$ -	\$ -	1
100.2	INSURANCE & BOND	LS	1	\$ -	\$ -	2
101.1	PREPARING RIGHT OF WAY	LS	1	\$ -	\$ -	3
103.1	REMOVE CONCRETE CURB	LF	149.6	\$ -	\$ -	4
103.3	REMOVE CONCRETE SIDEWALKS & DRIVEWAYS (<1,000 SF)	SF	423.8	\$ -	\$ -	5
500.1	CONCRETE CURB (<1000)	LF	61.3			6
*502.1	CONCRETE SIDEWALKS - 36" SIDEWALK	SF	350.1			7
*502.1	CONCRETE SIDEWALKS - 48" SIDEWALK	SF	3,028.8			8
*502.1	CONCRETE SIDEWALKS - 60" SIDEWALK	SF	205.0			9
*502.1	ADA RAMPS - S.A. TY 1 AND TXDOT TY 10	SF	297.6	\$ -	\$ -	10
503.1	PORTLAND CEMENT CONCRETE DRIVEWAYS	SF	288.0	\$ -	\$ -	11
530.0	BARRICADES, SIGNS AND TRAFFIC HANDLING	LS	1	\$ -	\$ -	12
Total Bid Amount					\$ -	



# City of Helotes

## Leslie Road Sidewalk Project

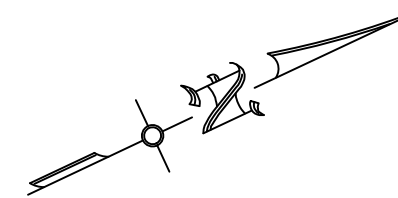


TBPE FIRM NO. F-366

8918 TESORO DRIVE  
SAN ANTONIO, TX 78217



LOCATION MAP



Mayor  
Tom Schoolcraft

Mayor Pro-Tem  
Alex Blue

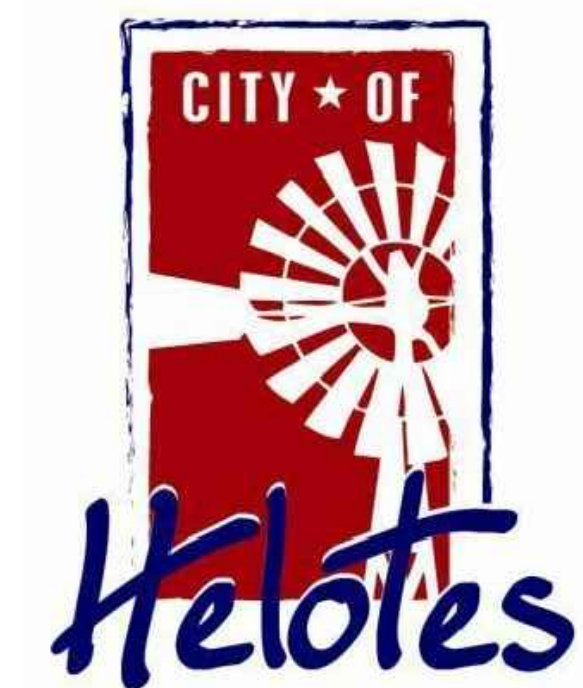
Council Members  
Paul Friedrichs  
Edward Villanueva  
Bert Buys  
Cynthia Massey

### SHEET INDEX

<u>SHEET</u>	<u>DESCRIPTION</u>
1	TITLE SHEET
2	GENERAL NOTES & QUANTITIES
3-7	PLAN SHEETS
8	WHEELCHAIR RAMP STANDARDS & CONCRETE DRIVEWAY STANDARDS
9	TXDOT PEDESTRIAN FACILITIES CURB RAMPS STANDARDS



<http://www.texas811.org/>



C:\Users\YNovan\Desktop\Leslie Rd Sidewalk Project\Mayor's Version\SDW\PLAN.dwg  
Friday, April 24, 2015, 2:48pm

GENERAL NOTES

- A) ALL WORK SHALL BE PERFORMED DURING DAYLIGHT HOURS. LANE CLOSURES SHALL BE COORDINATED WITH THE CITY OF HELOTES. PROPOSED CLOSURES MUST BE SUBMITTED TO THE CITY FOR APPROVAL A MINIMUM OF 72 HOURS PRIOR TO THE CLOSURE. CONTRACTOR SHALL FOLLOW TXDOT BARRICADE & CONSTRUCTION STANDARDS FOR CLOSING DOWN LANES NEEDED FOR CONSTRUCTION.
- B) ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST TXDOT BARRICADES AND CONSTRUCTION STANDARDS, THE TEXAS MUTCD, OR AS DIRECTED BY THE CITY OF HELOTES.
- C) ANY ADDITIONAL SIGNS OR BARRICADES REQUIRED BY THE CITY OF HELOTES OR ENGINEER DURING CONSTRUCTION WILL NOT BE PAID FOR SEPARATELY BUT ARE CONSIDERED INCLUDED WITH BID ITEMS.
- D) CONTRACTOR SHALL ALLOW FOR TWO-WAY TRAFFIC AT ALL TIMES DURING CONSTRUCTION.
- E) THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL WASTE MATERIALS UPON COMPLETION.
- F) THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER OF ANY AND ALL CONFLICTS OR DISCREPANCIES IN THE PLANS.
- G) THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, AND THE EXTENT OF DEMOLITION OR REMOVAL OF EXISTING CONDITIONS BEFORE PROCEEDING WITH WORK.
- H) THE CONTRACTOR SHALL CONTINUOUSLY MONITOR CONSTRUCTION OPERATIONS AND COOPERATE WITH THE CITY OF HELOTES TO MINIMIZE INCONVENIENCES TO THE PUBLIC. THE CONTRACTOR SHALL NOT IMPEDE TRAFFIC UNLESS PREVIOUSLY APPROVED BY AND COORDINATED WITH THE CITY OF HELOTES.
- I) CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ALL WORK WITHIN THE ROW UNLESS COORDINATED WITH THE CITY OF HELOTES. CONTRACTOR WILL COORDINATE WITH THE CITY OF HELOTES FOR PERMISSION TO PLACE EXCAVATED MATERIAL AND/OR BASE IN THE HELOTES FESTIVAL GROUNDS. EXCAVATED MATERIAL AND/OR BASE SHALL BE MAINTAINED IN THE HELOTES FESITVAL GROUNDS AND CONTRACTOR SHALL USE THE EXISTING 28' DRIVEWAY TO BRING MATERIAL IN AND OUT OF PROPERTY.
- J) THE CONTRACTOR SHALL MAINTAIN EXISTING GRADES OR RE-ESTABLISH EXISTING GRADES, IF DISTURBED, WHERE PROPOSED IMPROVEMENTS DO NOT OCCUR.
- K) THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING, RELOCATING AND MAINTAINING TRAFFIC CONTROL THROUGHOUT THE DURATION OF THE PROJECT IN ACCORDANCE WITH THE "TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- L) THE CONTRACTOR SHALL TAKE CARE IN WORKING AROUND EXISTING IRRIGATION SYSTEMS. ANY DAMAGE TO THOSE SYSTEMS CAUSED BY CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR WITH NO ADDITIONAL PAY, AND ANY ADJUSTMENTS NECESSARY TO THE IRRIGATION SYSTEM SHALL BE CONSIDERED INCLUDED IN THE VARIOUS BID ITEMS.
- M) ALL WORK IS SUBJECT TO INSPECTION AND APPROVAL BY THE CITY OF HELOTES.
- N) THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO EXISTING PAVEMENT, CONCRETE SIDEWALKS, EXISTING WATERLINE, STRUCTURES, OR FENCES TO ORIGINAL OR BETTER CONDITION, ANY DAMAGE TO THOSE SYSTEMS CAUSED BY CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR WITH NO ADDITIONAL PAY, AND ANY ADJUSTMENTS NECESSARY SHALL BE CONSIDERED INCLUDED IN THE VARIOUS BID ITEMS.
- O) LOCATION AND DEPTH OF EXISTING UTILITIES AND SERVICES SHOWN ON PLANS ARE APPROXIMATE ONLY AND BASED ON BEST AVAILABLE DATA. ACTUAL LOCATION AND DEPTHS OF EXISTING UTILITIES MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- P) THE CONTRACTOR SHALL AVOID CUTTING ROOTS LARGER THAN ONE INCH IN DIAMETER WHEN EXCAVATING NEAR EXISTING TREES. EXCAVATION IN VICINITY OF TREES SHALL PROCEED WITH CAUTION. ROOTS WILL BE CUT BY HAND, NOT BY AN EXCAVATOR OR OTHER CONSTRUCTION EQUIPMENT.
- Q) CONTRACTOR SHALL COMPLY WITH OSHA REGULATIONS AND STATE OF TEXAS LAW CONCERNING EXCAVATION
- R) CONTRACTOR IS NOT REQUIRED TO OBTAIN CITY PERMITS FOR CONSTRUCTION.

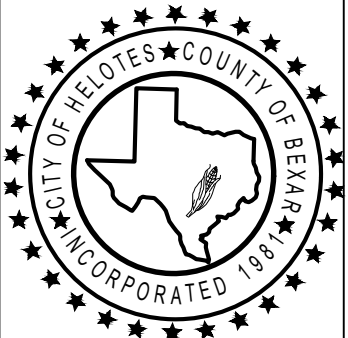
ITEM NO.	Description	Unit	Quantity
100.1	MOBILIZATION	LS	1
100.2	INSURANCE & BOND	LS	1
101.1	PREPARING RIGHT OF WAY	LS	1
103.1	REMOVE CONCRETE CURB	LF	149.6
103.3	REMOVE CONCRETE SIDEWALKS & DRIVEWAYS (<1,000 SF)	SF	423.8
500.1	CONCRETE CURB (<1000)	LF	61.3
*502.1	CONCRETE SIDEWALKS - 36" SIDEWALK	SF	350.1
*502.1	CONCRETE SIDEWALKS - 48" SIDEWALK	SF	3,028.8
*502.1	CONCRETE SIDEWALKS - 60" SIDEWALK	SF	205.0
*502.1	ADA RAMPs - S.A. TY 1 AND TXDOT TY 10	SF	297.6
503.1	PORTLAND CEMENT CONCRETE DRIVEWAYS	SF	288.0
530.0	BARRICADES, SIGNS AND TRAFFIC HANDLING	LS	1

\* ITEMS 103.1 AND 103.3 ARE DUE TO INSTALLATION OF RAMPS AND DRIVEWAYS

GENERAL NOTES CONTINUED

- S) ANY OBSTRUCTIONS ENCOUNTERED DURING CONSTRUCTION SHALL BE ADJUSTED BY THE CONTRACTOR. THIS WORK WILL NOT BE PAID FOR DIRECTLY, BUT IS CONSIDERED INCLUDED WITH THE VARIOUS BID ITEMS.
- T) THE CONTRACTOR SHALL TAKE CARE IN WORKING AROUND EXISTING UTILITIES. ANY DAMAGE CAUSED BY CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR WITH NO ADDITIONAL PAY. ANY ADJUSTMENTS NECESSARY TO THE EXISTING UTILITIES WILL BE CONSIDERED INCLUDED WITH THE VARIOUS BID ITEMS.
- U) THE CITY OF HELOTES HAS ADOPTED THE STANDARD SPECIFICATIONS OF THE CITY OF SAN ANTONIO AND TXDOT. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST CITY OF SAN ANTONIO AND TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION. \*NOTE: FULL SPEC SHEETS CAN BE FOUND AT THE BELOW LINKS
- SAN ANTONIO ROADWAY STANDARDS  
<http://www.sanantonio.gov/TCI/Current-Vendor-Resources/Standard-Specifications-and-Details#285913-roadway-standards>
- TXDOT PEDESTRIAN FACILITIES CURB RAMPS  
<ftp://ftp.dot.state.tx.us/pub/txdot-info/cmd/cserve/standard/roadway/ped12a.pdf>
- TXDOT BARRICADE AND CONSTRUCTION STANDARDS  
<ftp://ftp.dot.state.tx.us/pub/txdot-info/cmd/cserve/standard/traffic/bc-14.pdf>
- S) COLD JOINTS AT THE END OF A POUR (OF THE 48" SIDEWALK), SHOULD THEY OCCUR, WILL HAVE THREE (3) #4 SMOOTH DOWEL BARS, 24" LONG 18" O.C. WITH ONE OF THE THREE PLACED AT THE CENTER OF THE SIDEWALK.
- T) ALL UTILITIES SHOWN ARE APPROXIMATE ONLY BASED ON THE BEST AVAILABLE DATA. THE CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION OF EACH UTILITY PRIOR TO CONSTRUCTION.
- U) REMOVING AND RELOCATING EXISTING SIGNS AND TREE ISSUES ARE TO BE CONSIDERED PART OF ITEM 101.1 - PREPARING ROW. NO TREES ARE TO BE REMOVED OR DAMAGED.
- V) AT END OF DRIVEWAYS AND WHERE GRADE SLOPES AWAY FROM THE EDGE OF SIDEWALK, INSTALL A CONCRETE BEAM FOR EXTRA STRENGTH, BEAM TO INCLUDE REBAR, BE A MINIMUM 6 INCHES WIDE AND EXTEND A MINIMUM OF 6 INCHES BELOW THE GRADE. CONTRACTORS SHALL CONSULT WITH THE CITY OF HELOTES FOR FINAL LOCATIONS OF CONCRETE BEAMS.
- W) WHERE GRADE SLOPES AWAY FROM SIDEWALK BUILD UP FILL/DIRT BANK TO 10% SLOPE WHERE POSSIBLE. DO NOT PLACE FILL/DIRT WITHIN 2 FEET OF TREE TRUNK.

LEGEND
--- EXISTING ROW
⌏ SIGN
— GAS LINE
⊙ STORM WATER MH
● TREE
— EXIST GUARDRAIL
▭ PROPOSED SIDEWALK
— WATER LINE
DETECTABLE WARNING SURFACE



LESLIE ROAD SIDEWALK IMPROVEMENTS  
CITY OF HELOTES, TEXAS  
GENERAL NOTES

LBV

engineers | architects

6010 MCPHERSON, SUITE 110  
LAREDO, TX 78041

surveyors

PH. (956) 462-5511

WWW.LBVINC.COM

LBV

engineers | architects

6010 MCPHERSON, SUITE 110  
LAREDO, TX 78041

surveyors

PH. (956) 462-5511

WWW.LBVINC.COM

DRAWING NO.
2 of 9
DRAWN BY: FELISHA NOVAN
CHECKED BY: B. SANDERFER
APPROVED BY:
JOB NO: 1

C:\Users\Troyan\Desktop\Leslie Rd Sidewalk Project\Myor's Version\SDWPLAN.dwg  
Tuesday, March 07, 2017, 11:44am

O'Connor Drive

Leslie Road

LENGTH OF PROJECT = 1322.4'

START PROPOSED SIDEWALK  
TIE INTO EXISTING SIDEWALK

42.2'

20.0'

106.8'

66.9'

1.0'

5.0'

1.0'

PROPOSED 4' CONCRETE  
SIDEWALK MEASURED  
FROM BACK OF CURB

EXISTING CURB TO REMAIN

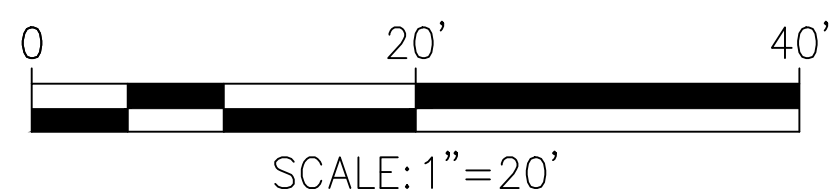
PROPOSED SIDEWALK  
PASSING SPACE  
DETAIL PAGE 6 OF 7  
BOC O/S 5'

EXISTING ELECTRICAL  
CONTROL BOX

EXISTING SIGN  
BOC O/S 4'  
MOVE SIGN TO  
BOC O/S 5'

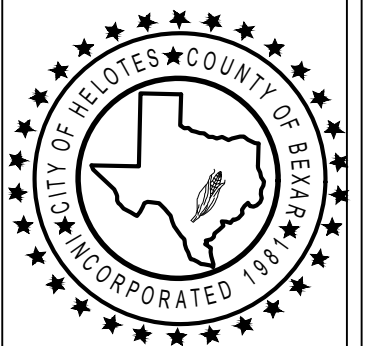
SCHOOL  
SPEED  
LIMIT  
**20**  
7:00 am to 9:30 am  
2:00 pm to 5:00 pm

Helotes Festival  
Association  
20.11 Acres  
Vol. 7279, PG 273  
O.P.R.B.C.T.



LEGEND

- EXISTING ROW
- SIGN
- GAS LINE
- STORM WATER MH
- TREE
- EXIST GUARDRAIL
- PROPOSED SIDEWALK
- WATER LINE
- ||||| DETECTABLE WARNING SURFACE



LESIE ROAD SIDEWALK IMPROVEMENTS  
CITY OF HELOTES, TEXAS  
PLAN LAYOUT

TYPE FIRM NO. F-386  
TBPLS FIRM NO. 10726500  
**LNV**  
engineers | architects  
6010 MCPHERSON SUITE 110  
LAREDO, TX 78041  
surveyors  
PH. (956) 462-5511  
WWW.LNVINC.COM

DRAWING NO.
3 of 9
DRAWN BY: FELISHA NOVAN
CHECKED BY: B. SANDERFER
APPROVED BY:
JOB NO: 1

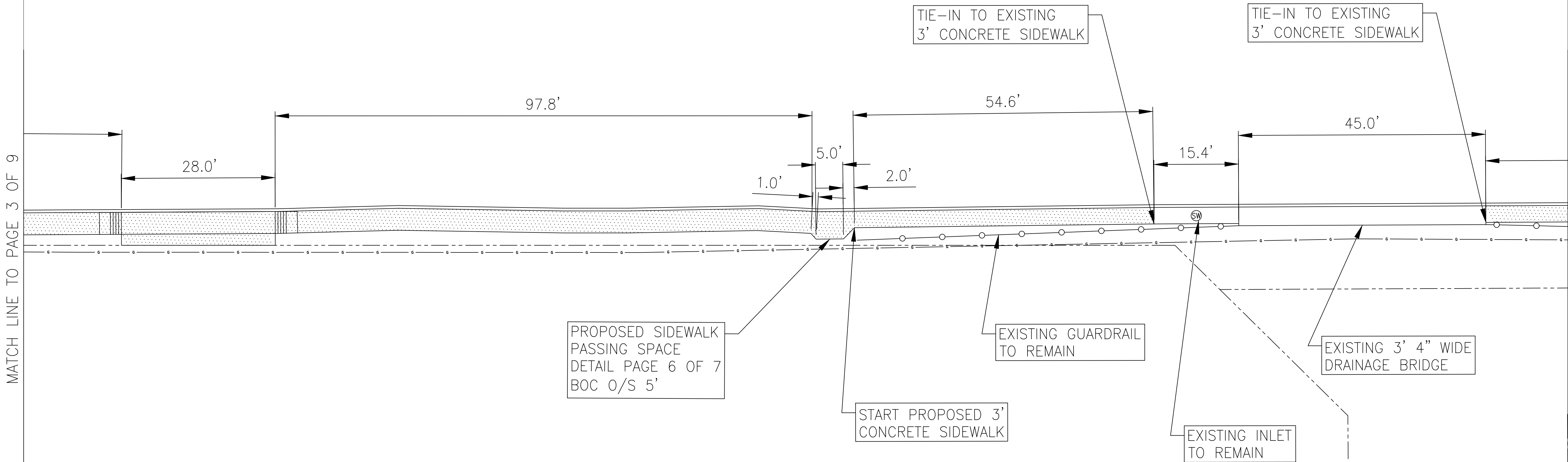
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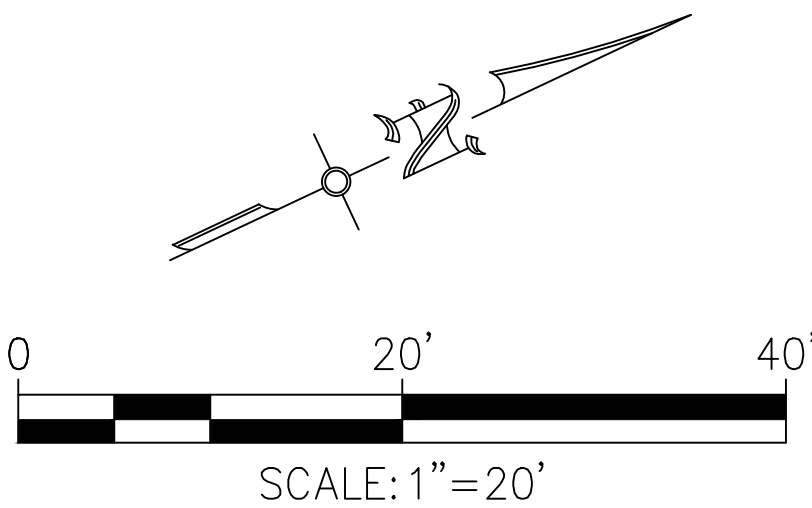
MATCH LINE TO PAGE 3 OF 9

# Leslie Road

LENGTH OF PROJECT = 1322.4'



MATCH LINE TO PAGE 5 OF 9



Helotes Festival  
Association  
20.11 Acres  
Vol. 7279, PG 273  
O.P.R.B.C.T.

LEGEND	
---	EXISTING ROW
Ⓢ	SIGN
---	GAS LINE
⊙	STORM WATER MH
●	TREE
○	EXIST GUARDRAIL
▨	PROPOSED SIDEWALK
---	WATER LINE
	DETECTABLE WARNING SURFACE



LESIE ROAD SIDEWALK IMPROVEMENTS  
CITY OF HELOTES, TEXAS  
PLAN LAYOUT

TYPE FIRM NO. F-386  
TBP'S FIRM NO. 10125500  
**LNV**  
**engineers | architects**  
6010 MCPHERSON SUITE 110  
LAREDO, TX 78041  
**surveyors**  
PH. (956) 462-5511  
WWW.LNVINC.COM

DRAWING NO.
4 of 9
DRAWN BY: FELISHA NOVAN
CHECKED BY: B. SANDERFER
APPROVED BY:
JOB NO: 1



Leslie Road

LENGTH OF PROJECT = 1322.4'

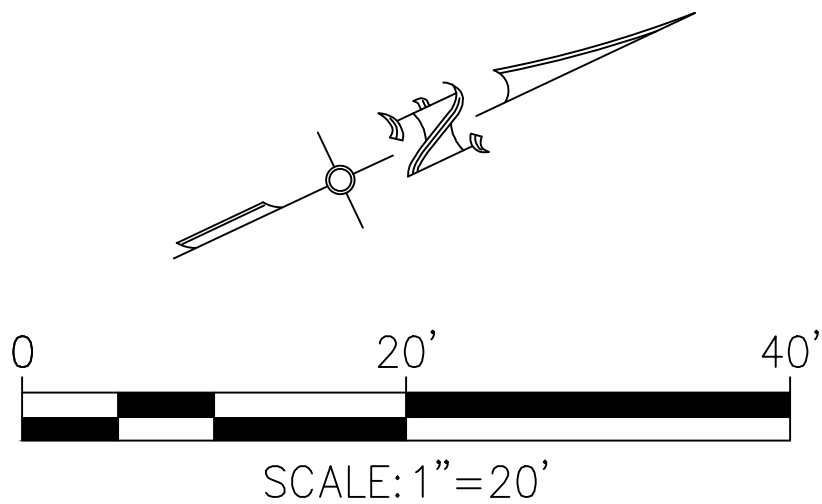
MATCH LINE TO PAGE 4 OF 9

MATCH LINE TO PAGE 6 OF 9

Drainage and Utility  
Esmt.  
(Vol. 7264, PG 1033)

Helotes Business Park  
Block 2, Lot 7  
1.65 Acres  
Vol. 9569, PG 52  
O.P.R.B.C.T.

Taco Bell-Helotes  
Lot 1A, Block 2  
0.770 Acres  
(33,559 SQ FT)



EXISTING GUARDRAIL  
TO REMAIN

PROPOSED 3'  
CONCRETE SIDEWALK

PROPOSED SIDEWALK  
RAMP TXDOT TY 10  
DETAIL PAGE 7 OF 7  
BOC O/S 3'

EXISTING 6'  
CONCRETE SIDEWALK  
TO REMAIN

TIE IN TO EXISTING  
6' CONCRETE SIDEWALK  
AT END OF  
SIDEWALK RAMP

PROPOSED SIDEWALK  
RAMP S.A. TY I  
MODIFICATION OF  
DETAIL PAGE 6 OF 7  
BOC O/S 6'

TIE IN TO EXISTING  
6' CONCRETE SIDEWALK  
AT END OF  
SIDEWALK RAMP

PROPOSED SDWLK  
RAMP S.A. TY I  
MODIFICATION OF  
DETAIL PG 6 OF 7  
BOC O/S 4'



EXISTING SIGN  
BOC O/S 3'  
MOVE SIGN  
BOC O/S 5'

BEGIN CONCRETE  
SIDEWALK  
BOC O/S 4'

EXISTING FIRE  
HYDRANT

54.4'

15.4'

9.6'

5.6'

5.0'

4.0'

8.7'

5.5'

5.0'

4.0'

Business Pkwy

LEGEND	
	EXISTING ROW
	SIGN
	GAS LINE
	STORM WATER MH
	TREE
	EXIST GUARDRAIL
	PROPOSED SIDEWALK
	WATER LINE
	DETECTABLE WARNING SURFACE



LESIE ROAD SIDEWALK IMPROVEMENTS  
CITY OF HELOTES, TEXAS  
PLAN LAYOUT

engineers | architects

6010 MCPHERSON SUITE 110  
LAREDO, TX 78041

surveyors

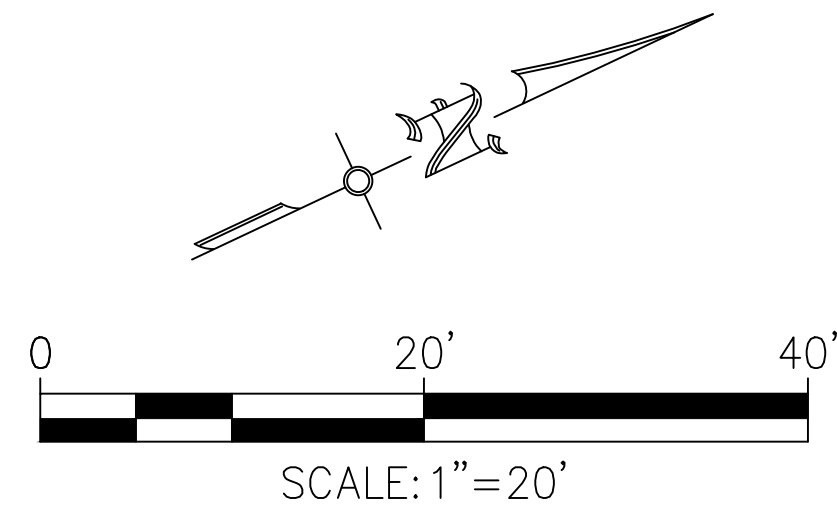
PH. (956) 462-5511

WWW.LNWINC.COM

DRAWING NO.
5 of 9
DRAWN BY: FELISHA NOVAN
CHECKED BY: B. SANDERFER
APPROVED BY:
JOB NO: 1

C:\Users\Troyan\Desktop\Leslie Rd Sidewalk Project\Myor's Version\SDMKPLandwg Tuesday, March 07, 2017, 11:45am

MATCH LINE TO PAGE 5 OF 9



# Leslie Road

LENGTH OF PROJECT = 1322.4'

91.3'

PROPOSED 4' CONC  
SIDEWALK

1.0'

5.0'

1.0'

EXISTING SIGN  
BOC O/S 3'  
MOVE SIGN  
BOC O/S 5'

RIGHT LANE  
MUST  
TURN RIGHT

PROPOSED SIDEWALK  
PASSING SPACE  
DETAIL PAGE 6 OF 7  
BOC O/S 5'

EXISTING CURB TO REMAIN

170.3'

1.0'

5.0'

1.0'

29.0'

PROPOSED SIDEWALK  
PASSING SPACE  
DETAIL PAGE 6 OF 7  
BOC O/S 5'

MATCH LINE TO PAGE 7 OF 9

WALMART  
Helotes MarketPlace  
Block 1, Lot 3  
3.78 Acres  
Vol. 9639, PG 161  
O.P.R.B.C.T.

## LEGEND

- EXISTING ROW
- SIGN
- GAS LINE
- STORM WATER MH
- TREE
- EXIST GUARDRAIL
- ▨ PROPOSED SIDEWALK
- WATER LINE
- |||| DETECTABLE WARNING SURFACE



LESIE ROAD SIDEWALK IMPROVEMENTS  
CITY OF HELOTES, TEXAS  
PLAN LAYOUT

**LNV**  
engineers | architects

6010 MCPHERSON, SUITE 110  
LAREDO, TX 78041  
WWW.LNVINC.COM

TBPE FIRM NO. F-386  
TBPLS FIRM NO. 10126500

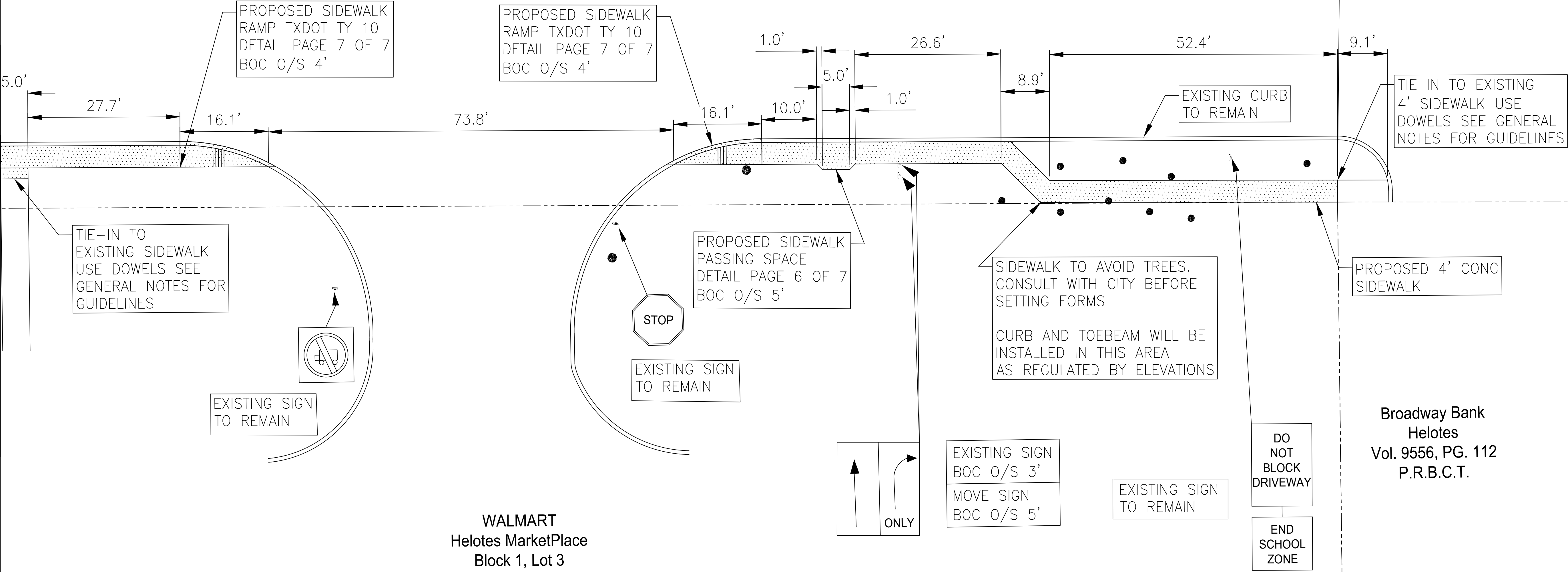
surveyors  
PH. (956) 462-5511

DRAWING NO.
6 of 9
DRAWN BY: FELISHA NOVAN
CHECKED BY: B. SANDERFER
APPROVED BY:
JOB NO: 1

Leslie Road

LENGTH OF PROJECT = 1322.4'

MATCH LINE TO PAGE 6 OF 7

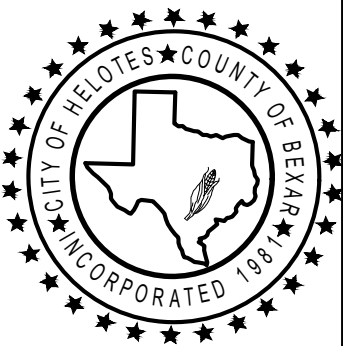


WALMART  
Helotes MarketPlace  
Block 1, Lot 3  
3.78 Acres  
Vol. 9639, PG 161  
O.P.R.B.C.T.

Broadway Bank  
Helotes  
Vol. 9556, PG. 112  
P.R.B.C.T.

LEGEND

---	EXISTING ROW
□	SIGN
—○—	GAS LINE
●	STORM WATER MH
●	TREE
—○—	EXIST GUARDRAIL
▨	PROPOSED SIDEWALK
—○—	WATER LINE
	DETECTABLE WARNING SURFACE



LESIE ROAD SIDEWALK IMPROVEMENTS  
CITY OF HELOTES, TEXAS  
PLAN LAYOUT

**LNV**  
engineers | architects

8010 MCPHERSON SUITE 110  
LAREDO, TX 78041  
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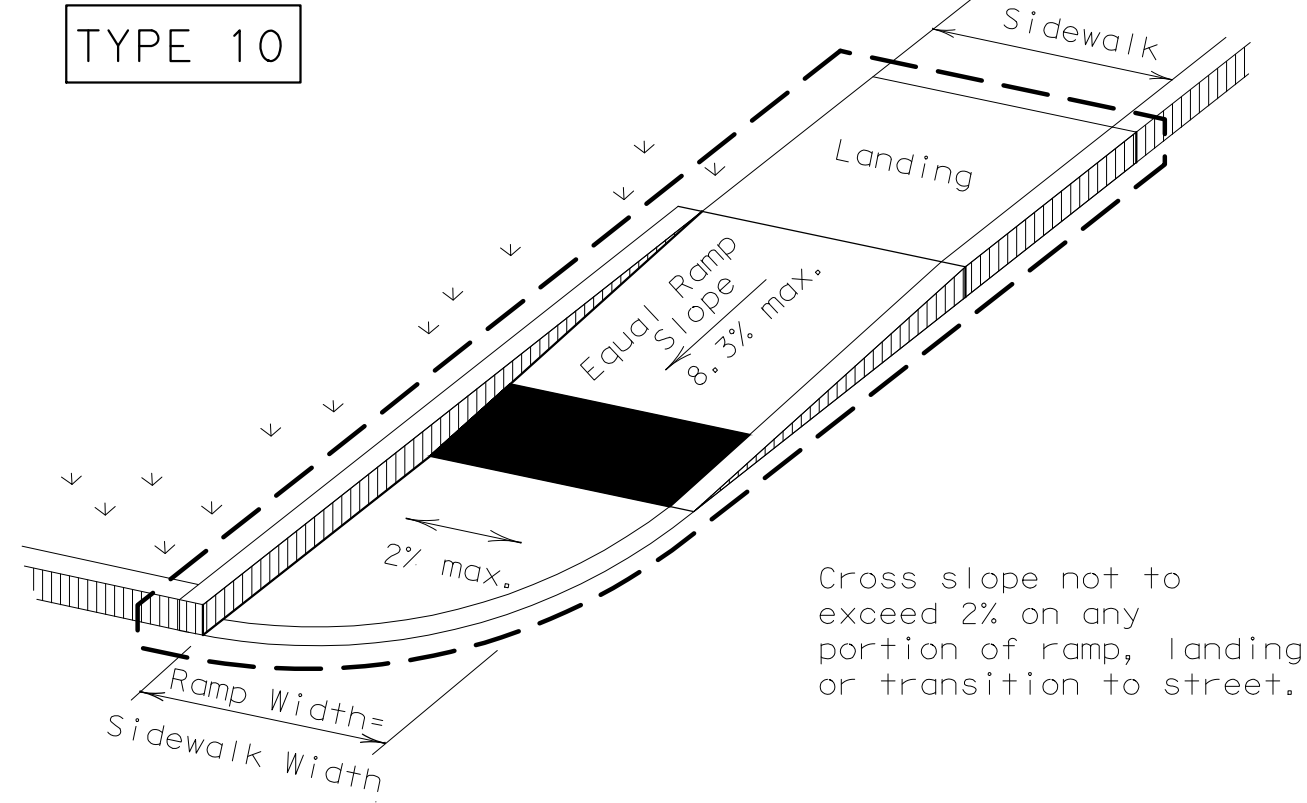
TBPE FIRM NO. F-366  
TBPLS FIRM NO. 10126500

surveyors

DRAWING NO.
7 of 9
DRAWN BY: FELISHA NOVAN
CHECKED BY: B. SANDERFER
APPROVED BY:
JOB NO: 1



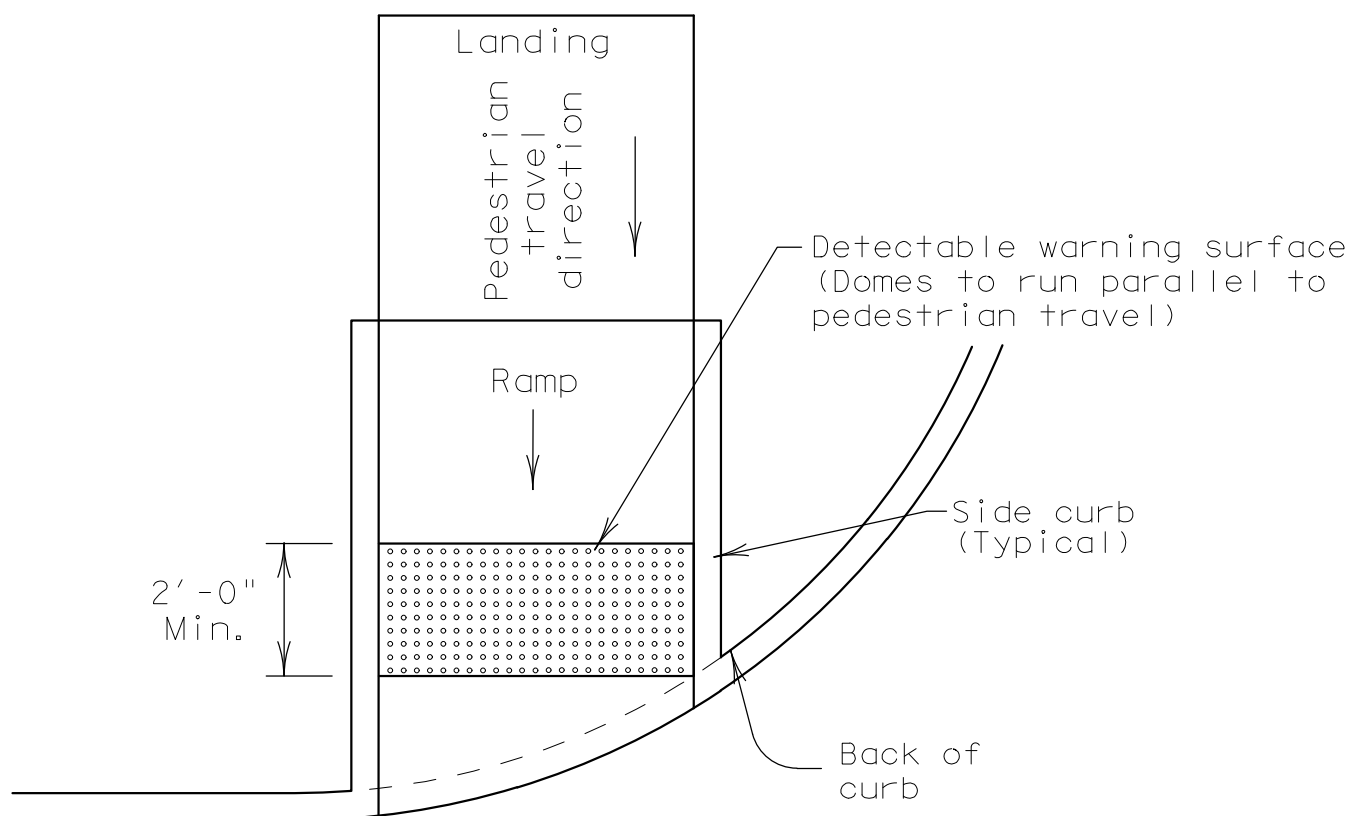




(Sidewalk adjacent to curb)

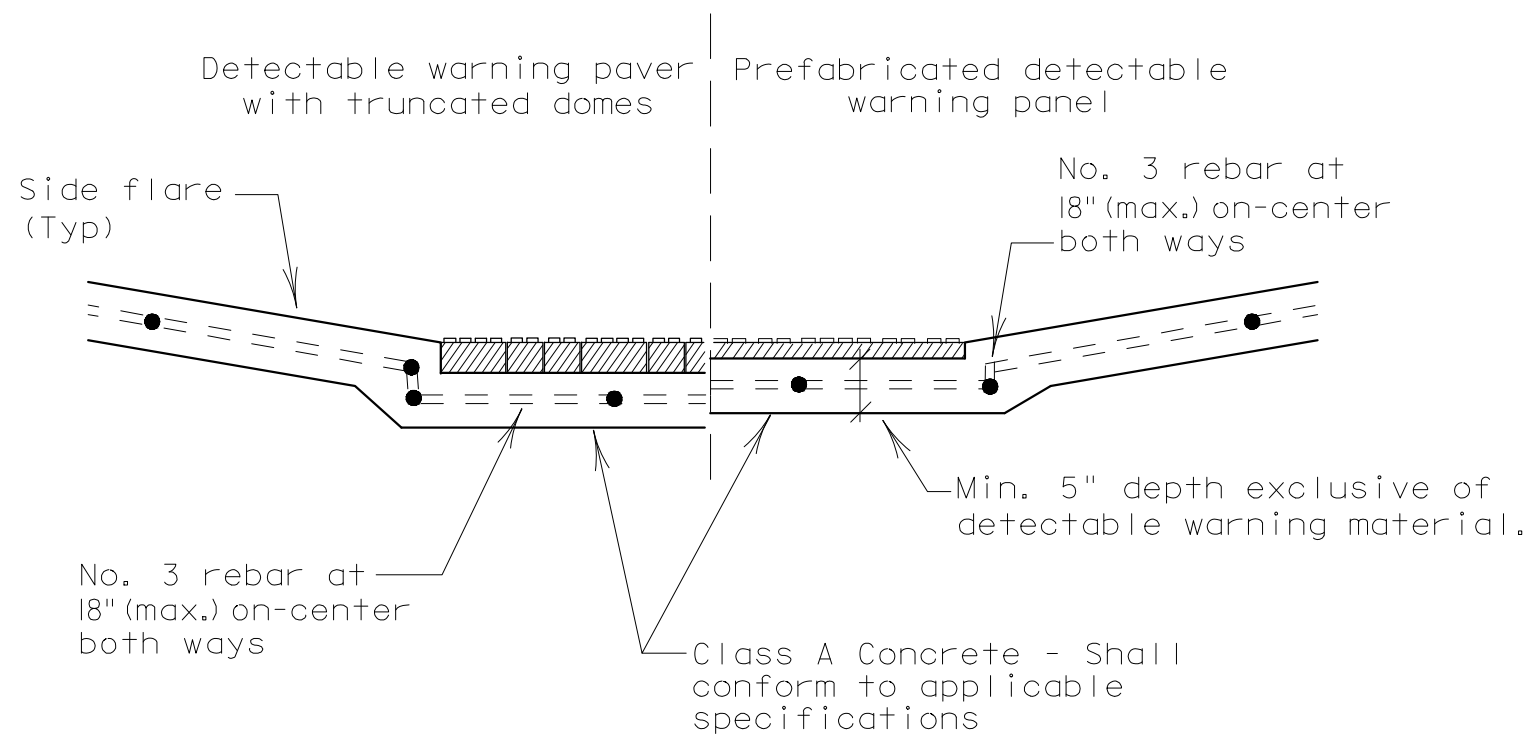
## DIRECTIONAL RAMPS WITHIN RADIUS

## DETECTABLE WARNINGS



## DIRECTIONAL CURB RAMP

Typical placement of detectable warning surface on sloping ramp run.



## SECTION: CURB RAMP AT DETECTABLE WARNING

## General Notes

### Curb Ramps

1. Install a curb ramp or blended transition at each pedestrian street crossing.
2. All slopes shown are maximum allowable. Lesser slopes that will still drain properly should be used. Adjust curb ramp length or grade of approach sidewalks as directed.
3. The minimum sidewalk width is 4'. Where the sidewalk is adjacent to the back of curb, a 5' sidewalk width is desirable. Where a 4' sidewalk cannot be provided due to site constraints, sidewalk width may be reduced to 3' for short distances. 5' x 5' passing areas at intervals not to exceed 200' are required.
4. Landings shall be 5' x 5' minimum with a maximum 2% slope in any direction.
5. Maneuvering space at the bottom of curb ramps shall be a minimum of 4' x 4' wholly contained within the crosswalk and wholly outside the parallel vehicular travel path.
6. Maximum allowable cross slope on sidewalk and curb ramp surfaces is 2%.
7. Provide flared sides where the pedestrian circulation path crosses the curb ramp. Flared sides shall be sloped at 10% maximum, measured parallel to the curb. Returned curbs may be used only where pedestrians would not normally walk across the ramp, either because the adjacent surface is planted, substantially obstructed, or otherwise protected.
8. Additional information on curb ramp location, design, light reflective value and texture may be found in the current edition of the Texas Accessibility Standards (TAS) and 16 TAC 68.102.
9. To serve as a pedestrian refuge area, the median should be a minimum of 6' wide, measured from back of curbs. Medians should be designed to provide accessible passage over or through them.
10. Small channelization islands, which do not provide a minimum 5' x 5' landing at the top of curb ramps, shall be cut through level with the surface of the street.
11. Crosswalk dimensions, crosswalk markings and stop bar locations shall be as shown elsewhere in the plans. At intersections where crosswalk markings are not required, curb ramps shall align with theoretical crosswalks unless otherwise directed.
12. Handrails are not required on curb ramps. Provide curb ramps wherever on accessible route crosses (penetrates) a curb.
13. Curb ramps and landings shall be constructed and paid for in accordance with Item 531 "Sidewalks".
14. Place concrete at a minimum depth of 5" for ramps, flares and landings, unless otherwise directed.
15. Provide a smooth transition where the curb ramps connect to the street.
16. Existing features that comply with TAS may remain in place unless otherwise shown on the plans.

### Detectable Warning Material

18. Curb ramps must contain a detectable warning surface that consists of raised truncated domes complying with Section 705 of the TAS. The surface must contrast visually with adjoining surfaces, including side flares. Furnish and install an approved cast-in-place dark brown or dark red detectable warning surface material adjacent to uncolored concrete, unless specified elsewhere in the plans.
19. Detectable Warning Materials must meet TxDOT Departmental Materials Specification DMS 4350 and be listed on the Material Producer List. Install products in accordance with manufacturer's specifications.
20. Detectable warning surfaces must be slip resistant and not allow water to accumulate.
21. Detectable warning surfaces shall be a minimum of 24" in depth in the direction of pedestrian travel, and extend the full width of the curb ramp or landing where the pedestrian access route enters the street.
22. Detectable warning surfaces shall be located so that the edge nearest the curb line is at the back of curb. Align the rows of domes to be perpendicular to the grade break between the ramp run and the street. Detectable warning surfaces may be curved along the corner radius.
23. Shaded areas on Sheet 1 of 4 indicate the approximate location for the detectable warning surface for each curb ramp type.

### Detectable Warning Pavers

24. Furnish detectable warning paver units meeting all requirements of ASTM C-936, C-33. Lay in a two by two unit basket weave pattern or as directed.
25. Lay full-size units first followed by closure units consisting of at least 25 percent of a full unit. Cut detectable warning paver units using a power saw.

### Sidewalks

26. Provide clear ground space at operable parts, including pedestrian push buttons. Operable parts shall be placed within one or more reach ranges specified in TAS 308.
27. Place traffic signal or illumination poles, ground boxes, controller boxes, signs, drainage facilities and other items so as not to obstruct the pedestrian access route or clear ground space.
28. Street grades and cross slopes shall be as shown elsewhere in the plans.
29. Changes in level greater than 1/4 inch are not permitted.
30. The least possible grade should be used to maximize accessibility. The running slope of sidewalks and crosswalks within the public right of way may follow the grade of the parallel roadway. Where a continuous grade greater than 5% must be provided, handrails may be desirable to improve accessibility. Handrails may also be needed to protect pedestrians from potentially hazardous conditions. If provided, handrails shall comply with TAS 505.
31. Handrail extensions shall not protrude into the usable landing area or into intersecting pedestrian routes.
32. Driveways and turnouts shall be constructed and paid for in accordance with Item "Intersections, Driveways and Turnouts". Sidewalks shall be constructed and paid for in accordance with Item, "Sidewalks".
33. Sidewalk details are shown elsewhere in the plans.

### NOTES / LEGEND:

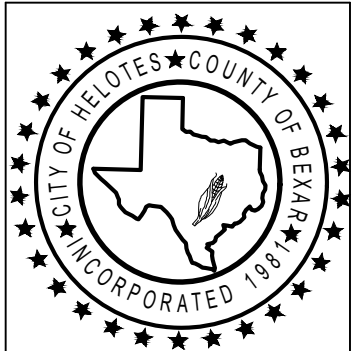
See General Notes on sheet 2 of 4 for more information.

- Denotes planting or non-walking surface not part of pedestrian circulation path.

— Ramp Limits of Payment

■ Detectable Warning Surface

		Design Division Standard	
PEDESTRIAN FACILITIES			
CURB RAMPS			
PED-12A			
FILE: ped12a.dgn	DN: TxDOT	CK: RM	DN: TxDOT
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VP June 13, 2012	DIST	COUNTY	SHEET NO.



LESLIE ROAD SIDEWALK IMPROVEMENTS  
CITY OF HELOTES, TEXAS

STANDARDS AND DETAILS



DRAWING NO.
9 of 9
DRAWN BY: FELISHA NOVAN
CHECKED BY: B. SANDERFER
APPROVED BY:
JOB NO: 1